



# *Simple Answers to Basic Questions*

About  
Emergency  
Preparedness  
Information for  
Promoters



AMIGUO VIDA  
**Latino  
Health  
INITIATIVE**  
MONTGOMERY COUNTY, MD

**APC** Advancing  
Public Health  
Preparedness  
Through  
Innovation  
**Advanced Practice Centers**

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
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From the Latino Health Initiative:

*Vías de la Salud* Health Promoters:

Doris Armas

Elva Jaldin

Luz Aleyda Perez

Maria Elena Rocha

Maria Nelly Torres

Rosa Lidia Fernández

Mercedes Moore, Program Coordinator

Sonia Mora, Manager

From the Advanced Practice Center:

Kay Aaby, Program Manager

Rachel Abbey, Program Specialist II

Betsy Burroughs, Communications Officer

Gloria Franco, Office Services Coordinator

Marta Gil, Registered Nurse

From the University of Maryland:

Olivia Carter-Pokras, Associate Professor

From Linkages to Learning/Highland Elementary School:

Claudia Silva

From Montgomery Housing Partnerships/Amherst Square:

Sulema Middleton

Nora Ortiz

Consultants:

Nancy Newton

Claudia Campos

Carlos Ugarte

# INTRODUCTION

There is truth in every saying:

*“It is better to lose one minute in your life,  
than to lose your life in a minute.”*

With a little planning and common sense, you can be better prepared for the unexpected.

No one likes to think about—let alone talk about—an emergency that could disrupt our daily lives, or worse, do harm to us or our loved ones. Yet this thoughtful consideration is essential to effective emergency planning. **A little advance planning can make the difference between tragedy and survival.**

This manual was created by the Latino Health Initiative of Montgomery County. The manual is for promoters who work with the Latino community to educate members of the community about how and why to prepare for an emergency or a disaster.

The manual contains common questions about emergencies and the preparation needed to protect individuals and families facing an emergency. It offers simple and easy to understand answers. The document serves as a reference and review of knowledge for promoters.

The contents of the manual correspond to the three steps in emergency preparedness of the campaign “Ready Montgomery! Emergency Preparedness and Response.” The campaign is sponsored by the Advanced Practice Center, Public Health Emergency Preparedness and Response Program of Montgomery County, Maryland. The three steps in emergency preparedness are:

1. Start a conversation with the family about the types of emergency events that are most likely to happen and how to prepare for them.
2. Make a plan and share it with the family.
3. Make an emergency supply kit to help shelter in place in the event of an emergency.

The following pages contain detailed information about each one of these steps. The last chapter has more information about the types of emergencies that might happen. At the end, there is list of information services and help available in Montgomery County.

# *I. Start a Conversation With the Family About Possible Emergencies*

## **What is a “public emergency?”**

Emergencies or unexpected situations out of one’s control can happen to anyone. A serious illness in the family, a traffic accident, the sudden death of a loved one, being the victim of a robbery or assault, the deportation of a family member, and the loss of a job are all examples of **personal or family emergencies**.

In contrast to a personal emergency, a **public emergency** exists when a situation or event that puts a large number of people at risk of death or serious harm happens or is about to happen. A public emergency can be an act of God or a natural disaster—like a hurricane—or it can be man-made—like an act of terrorism.

If an emergency happens, the government and rescue organizations will take action to limit deaths and injuries in the population. The government is working with many different agencies to prevent public emergencies, but it is not always possible. Everyone can do certain simple things to prepare themselves and their loved ones for a public emergency.

## **Do public health emergencies happen in the countries that we came from?**

Yes. In Central and South America there have been many types of public emergencies. Many have been natural disasters. One of the biggest emergencies in recent years was Hurricane Mitch in 1998, which flooded many parts of Central American, caused more than 20,000 deaths, and left millions without homes. Other emergencies include the 2001 earthquake in El Salvador and the eruption of the volcano Ruiz in Colombia in 1985.

Other emergencies have been man-made, like the thousands of people who had to flee the violence in their countries during the 1980s and relocate to refugee camps.

## **What are possible causes of an emergency?**

Public authorities and specialists in public health have identified various types of causes of emergencies. These include:

- **Natural disasters and severe weather:** Extreme cold, hurricanes, floods, earthquakes, volcanic eruptions, drought, etc.
- **Biological attack or bioterrorism:** When an individual or group uses germs as a weapon to contaminate the air.
- **Chemical contamination:** Contamination can happen when an individual or a group uses a toxic gas, liquid or solid that can poison people and the environment. It can also be caused by an accident; for example when a tank of an industrial toxic breaks and releases poison.
- **Explosions, bombs and fires:** Accidental or man-made, these could be a fire in a home or an accident in a public transportation system, such as the subway.



- **Radiation emergency:** It could be a “dirty bomb” or an accident in a nuclear power plant that contaminates a specific area with radioactive material.
- **Disease outbreaks or epidemics:** This happens when a large number of people get sick with a highly contagious germ, like the bird flu virus (the “chicken flu”).

There are other conditions that affect the well-being of a whole community, such as gang violence, air pollution, and uncertainty about the immigrant situation. Although these conditions put many people in danger, they are not called “emergencies” because they are relatively long lasting situations and not “surprises.”

### **How likely is it that one of these emergencies affects me, my family or my community?**

It is impossible to predict emergencies with certainty, because the vast majority is unexpected. That is why emergency preparedness is the best way to take appropriate actions in a quick and decisive manner.

It is true that the world and our lives have changed since the terrorist attacks on the twin towers in New York and the Pentagon in Virginia on September 11, 2001. At the same time, the television, the radio, and the newspapers call our attention to terrible emergencies and possible future disasters. This can make us believe that the chance of one of these events happening is very high.

In reality, however, these events are not very frequent, and the probability that they might occur is not very high. But, the possibility and the threat do exist, and the consequences could be disastrous.

### **What type of emergency happens most often in the Washington metropolitan area?**

Emergencies caused by natural disasters are the most frequent in the metropolitan Washington area. Snow or ice storms, extreme cold, hurricanes, heavy rains, strong winds, and floods are some examples. Hurricane Isabel in 2003 caused more than a million people to lose electrical power. Thousands of families were without electricity for more than a week. For them, this was an emergency event.

### **What are the authorities and the government doing to prepare for possible emergencies?**

Local government (Montgomery County), state government (the State of Maryland) and the national or federal government (United States) are all working on many activities to prepare for emergencies. These include, among others:

- Trying to prevent epidemics and terrorist attacks before they happen.
- Developing plans for emergency responses.
- Educating medical providers, the media, and the public about what to do in an emergency.
- Training and equipping government rapid response teams to help control damage, infection, and contamination.



- Working with hospitals, laboratories, rapid response teams, and medical providers to be sure they have the supplies needed in the event of an emergency.

### **How do you know if there is an emergency?**

The best way to know if there is an emergency is through the radio and the television. The following radio and television stations that transmit in Spanish and can inform you about the kind of emergency, who is affected, and what to do.

#### **Radio:**

WKDL (Radio Capital)	730 AM
WILC (Viva 900)	900 AM
WACA (Radio América)	100.3 FM
WBZS (La Mega)	92.7 FM
WBPS (La Mega)	94.3 FM
WLZL (El Zol)	99.1 FM

#### **Television:**

Canal 14 (WFDC – Univisión)
Canal 64 (WZDC – Telemundo)
Canal 47 (WMDO – Telefutura)

### **What are the warning signs of an emergency?**

There are also some warning systems, depending on the type of emergency. For possible terrorist attacks, there is the Color-coded Threat Level System of the federal government. This system is designed to communicate with public safety officials and the public about the possibilities of a terrorist threat. It exists so that protective measures can be taken. The government can place specific geographic regions or industry sectors on a higher alert status than other regions or industries, based on specific threat information.

The Color-coded Threat Level System is like this:

Color	Threat Level
Green	Low
Blue	Guarded
Yellow	Elevated
Orange	High
Red	Severe

This system is not the same as the “Air Quality Index,” which also uses colors to alert people about the level of air pollution.

There is also the national Emergency Alert System. This system allows the President or other authorities to speak to the whole country through radio and television. These warning systems can provide information about all types of emergencies—from natural disasters to terrorist attacks. The national Emergency Alert System has never been used in this country, but you can hear the tests often on the radio: a sharp warning sound, followed by “This is test of the emergency alert system. It is only a test.”

States also have warning systems.

In the metropolitan Washington area, including Montgomery County, there are no warning systems that use sirens or other kinds of audible warnings.

### **Why should you be prepared for an emergency?**

As they saying goes, “It is better to lose one minute in life than to lose your life in a minute.” It does not take a lot of time or money to do advance planning and learn what to do in an emergency. This preparation helps to reduce fear, anguish and the losses that come with emergencies. It also creates a sense of control and reduces stress. People who are prepared can reduce the impact of disasters on their families. For example, if the electricity goes out for several days, a supply of medicines, water, and food that do not require refrigeration will allow you to have food without major inconveniences.

### **What should you talk about to prepare for an emergency?**

- Talk about the types of emergency events that might happen and the different ways to respond to them.
- Ask a friend or relative who does not live in Maryland, Virginia or DC to be your “family contact.” Many times it is easier to make a phone call to another part of the country than it is to make a call in the area affected by an emergency. Other family members can call this person and identify where they are.
- Have a local contact, too.
- Pick 2 places to meet: 1) right outside your house, in the event of a sudden emergency, such as a fire; 2) outside your neighborhood in case you can’t return home. Everyone must know the address and phone number.
- Analyze the possibilities of evacuating the area or staying put and sheltering in place.
- Know the emergency plans of your children’s schools or childcare and of your workplace.
- Consider older adults and other family members who may need special assistance.
- Plan for the care of your pets. Shelters generally do not accept animals.

### **Should you stay or go in the event of an emergency?**

This depends on type of the emergency and the instructions from the authorities. There may be situations when it is better to stay where you are—your home, your workplace, or another place. That way you can avoid unpredictable situations that might happen outside.

There may be emergencies when the possibility of survival depends on staying where you are: this process is called “shelter in place.” Generally, this happens with storms and natural disasters; it might also happen in the event of a terrorist attack of the biological, chemical or radiation type.

In other situations, the authorities will tell you to move to another place or to evacuate your community. Plan how you will get together with your family and where you will go.

### **What should you do if you have to evacuate?**

Make an evacuation plan:

- Plan places where your family will meet, both within and outside of your immediate neighborhood.
- If you have a car, keep a half tank of gas in it at all times in case you need to evacuate.
- Become familiar with alternate routes and other means of transportation out of your area.
- If you do not have a car, plan how you will leave if you have to.
- Take your emergency supply kit.
- Lock the door behind you.
- Take your pets with you, but understand that only service animals may be permitted in public shelters. Plan how you will care for your pets in an emergency.
- If time allows:
  - Call or email the “out-of-state” contact in your family communications plan.
  - Tell them where you are going.
  - If you are instructed to do so, shut off water, gas and electricity before leaving.
  - Leave a note telling others when you left and where you are going.
  - Check with neighbors who may need a ride.

### **What if you have to shelter in place?**

In certain emergency events, you may be ordered to shelter in place. This means staying inside your house or work place and protecting yourself there. If the authorities recommend that you shelter in place:

- Stay calm.
- Listen to the radio or watch TV for emergency instructions and shelter in place until you are told it is safe to leave.

Local authorities may not immediately be able to provide information on what is happening and what you should do. However, to stay informed you should watch TV, listen to the radio or check the Internet often for official news and instructions.

### **How and when should you shut off the electricity, gas and water?**

If there is damage to your home or you are instructed to turn off your utilities:

- Locate the electric, gas and water shut-off valves.
- Keep necessary tools near gas and water shut-off valves.
- Teach family members how to turn off utilities.
- If you turn the gas off, a professional must turn it back on. Do not attempt to do this yourself.

## **What if your children are in school or childcare when an emergency happens?**

In the event of an emergency, the schools will work with emergency response and security workers. The best place for children during an emergency can be their school, where they can remain under supervision and will be protected from outside threats. Students may be kept in school, sent home early, or moved to evacuation centers, according to the situation and the instructions by authorities.

Pay attention to public announcements on radio and television.

Ask your children's school or childcare center about their safety and communication plans:

- Ask the principal or director how the school will communicate with families during an emergency.
- Ask if they store adequate food, water and other basic supplies.
- Find out if they are prepared to "shelter-in-place" if need be, and where they plan to go if they must get away.

When schools implement "shelter in place" procedures, it is possible that you will not be allowed to get your children from school. In fact, if you go to school, it is likely that the doors will be closed to protect the children.

## **What if you are at work?**

Ask your employer:

- Is there a building evacuation plan?
- Have you thought about what to do if your employees can't go home?
- Do you have appropriate supplies on hand?

## **What kind of plans should you make for an elderly person or some one with special needs?**

An elderly, weak, or disabled person should have a plan that takes into account his or her special needs in the event of an emergency. The plan should include:

- A paper that organizes his or her medical history, medications, allergies, etc.
- How to organize things such as such as personal assistance if home health care is not available.
- How to get prescription medications and important supplies (such as batteries for hearing aids, wheelchairs) which might be damaged or lost in an emergency.

## **What if you have pets?**

You need to make plans for your pets and service animals. Store extra food, water, and other supplies at home, in case you have to shelter in place.

If you must evacuate, take your pets with you. However, remember that in public shelters only service animals may be allowed inside.

## **How can you help your neighborhood or building to prepare for an emergency?**

Talk to your neighbors about how you can work together during an emergency.

- Find out if anyone has specialized equipment like a power generator, or expertise such as medical knowledge, that might help in a crisis.
- Decide who will check on elderly or disabled neighbors.
- Make backup plans for children in case parents can't get home in an emergency.

Sharing plans and communicating in advance is a good strategy.

## **What should you NOT do in the event of an emergency?**

- Do NOT go to the hospital, except in a medical emergency.
- Do NOT light matches or turn on or off any electrical switches if you can smell gas or you think there could be a leak. Use a flashlight to be safe.
- Do NOT use a landline telephone (except in a major emergency).
- Do NOT disconnect any utilities unless the authorities tell you to do so, or unless there is damage to gas or water pipes or electrical lines.
- Do NOT drive your car unless you have been told to evacuate or there is a medical emergency. Find out about road conditions and any travel restrictions.
- Do NOT call 9-1-1 except in life or death situations. It is very important to keep this line open for true emergencies.

## ***II. Make a Plan***

### **Why should you make a plan?**

You and your family might not be together when an emergency happens, so you should plan how you are going to communicate and decide in advance what you will do in different situations.

### **How can you make a plan?**

It is very important to gather critical information and write it on a piece of paper or a card. Share it with your family. Having the information in one place will save precious time for when you need it most.

### **What type of information should a plan have?**

All family members and your children's schools should have the following types of information:

- Personal information: name, birth date, address, phone and cell phone numbers
- Nearest relative: name, relationship address, phone and cell phone numbers
- Local contact: name, relationship address, phone and cell phone numbers
- Out-of-state contact: name, relationship address, phone and cell phone numbers
- Pets care for by: name, address, phone and cell phone numbers
- Meeting places: outside your home; outside your neighborhood

All family members should also have some coins or a prepaid calling card in order to call your emergency contact. Sometimes, it may be hard to get a connection, or the phone system might be out of order, but be patient and keep trying.



### ***III. Prepare An Emergency Supply Kit: 9 Essential Items***



#### **What are the essential items in an emergency supply kit?**

You and your family should collect these 9 essential items to help you shelter in place in the event of an emergency. Store the kit in a safe place in your home. The kit will also be useful in the event that authorities give instructions to evacuate.

- Water
- Food
- Clothes
- Medications
- Flashlight and batteries
- Manual can opener
- Battery powered radio
- Hygiene items
- First aid

Every 6 months, check your supply kit and replace expired medicines, food, and batteries.



## **How much water do you need?**

One gallon per person per day for 3 days.

- Maintain water in clean, sealed, plastic containers.
- Store in cool dry place.
- Replace water and containers every 6 months to keep it fresh.

## **What if you do not know if the water is safe?**

To disinfect water:

- Add 16 drops of regular household bleach to 1 gallon of water.
- Let stand 15 minutes before using.

## **How much food should you store?**

Store at least enough food for three days for each person.

- Store food in dry, dark, cool space.
- Use plastic bags or tight containers to keep food covered at all times
- Date all emergency foods, consider shelf life, and rotate as appropriate:
  - Six months: powdered milk (boxed); dried fruit, crackers in sealed containers
  - One year: canned soup, fruit, vegetables, juice; peanut butter; cereals in sealed containers
  - Indefinitely (in proper containers): baking powder; salt; bouillon; instant coffee, tea, cocoa; dried corn, dry pasta, noncarbonated soft drinks, vegetable oils

## **What kinds of food should you store?**

Gather food according to the family's tastes. Pay special attention to special diets, infants, toddlers and elderly.

Plan foods that require no refrigeration, preparation or cooking and that need little or no water to prepare. For example:

- Canned and ready to eat meat, soup, fruit, and vegetables
- Dry cereals
- Peanut butter
- Dried fruit
- Canned nuts
- Crackers
- Canned juices
- Nonperishable milk
- Protein or fruit bars
- Baby food and formula
- Comfort food that makes you feel good or relieves stress

If you have pets, remember food and water for them.

## **Should you eat the food that is already in the house?**

Yes. Eat food in this order:

1. Refrigerator
2. Freezer
3. Cupboard

## **How much clothing do you need?**

- One complete change of clothing and footwear per person.
- Remember rain gear in the event of storms.

## **How can you store prescription medications?**

- Collect prescription medications to last for three days.
- Rotate stockpiled medications to ensure shelf life currency.
- Keep prescriptions current (Do not allow to lapse.)
- Discuss with your physician the possibility of stockpiling medication samples.
- What kind of flashlight do you need? A bright light is the best.
- Consider a headlight type of flashlight that allows your hands to stay free.
- Do not use candles. They can cause fires and they easily get lost when the electrical power returns.
- Remember extra batteries.

## **What kind of flashlight do you need?**

A powerful flashlight is the best kind.

- Consider getting a headlamp type of flashlight that you do not have to carry in your hand.
- Do not use candles! Candles can cause fires and it is easy to lose sight of lit candles when the electricity returns.
- Remember extra batteries.

## **What kind of radio do you need?**

- A battery-operated radio so you can keep up with the news and the weather.
- Consider a hand crank or solar powered radio
- Don't forget extra batteries. Buy them in advance in case the stores run out.

## **What personal hygiene items do you need?**

- Collect basics like soap, toilet paper, toothpaste and toothbrush.
- Include household bleach to disinfect water if needed.
- Include plastic garbage bags and ties (for personal sanitation if needed).
- Pre-moistened wipes can be useful for quick hygiene purposes.

## **What should a first aid kit contain?**

Collect the following first aid items and store them in a plastic bag. They will help treat small cuts, prevent an infection or help with decontamination.

- Adhesive bandages in various sizes
- Gauze pads
- Tape for the gauze
- Antibiotic ointment to prevent infection
- Triangular bandages (2)
- Sterile gloves
- Cleansing agent/soap or antiseptic wipes for disinfection
- Scissors
- Cold pack
- Include non-prescription drugs:
  - Aspirin or other analgesic to treat pain
  - Medicine for diarrhea
  - Antacid for stomach upset
  - Laxative

Other items and medicines you might include:

- Cell/mobile phone
- Ointment for burns to prevent infection
- Eye drops to wash the eyes
- Thermometer
- Tweezers
- Tube of petroleum jelly or other lubricant

## **What other items can you include in an emergency supply kit?**

In addition to the 9 essential items, you can also include:

- Some books, toys, or other things for entertainment
- A whistle to signal for help
- A dust mask or a cotton T-shirt, to help filter the air
- A wrench and pliers to cut off water and gas.

## ***IV. Get More Information About the Types of Emergencies That Might Happen***

### **What should you know about the types of emergencies that can happen?**

Emergency preparedness should take into account not only natural disasters but also man-made emergencies. Knowing what to do in an emergency is a fundamental part of preparation and can be critically important when you need to act without delay.

### **What types of emergencies are possible in the Washington, DC area?**

Public emergencies caused by natural disasters are the most frequent emergencies in the Washington metropolitan area. Earthquakes, volcanic eruptions, drought and other disasters are extremely rare or have never happened.

### **What is bioterrorism?**

A biological attack is the deliberate release of germs or other biological substances (called biological agents) that can make you sick. Many agents must be inhaled, enter through a cut in the skin or be eaten to make you sick. Bioterrorism, like all forms of terrorism, tries to:

- Injure or kill people
- Cause panic and fear
- Interrupt daily routines.

### **How can you tell if there has been a bioterrorism event?**

Unlike other forms of terrorism, like an explosion, a biological attack may or may not be immediately obvious. While it is possible that you will see signs of a biological attack, as was sometimes the case with the anthrax mailings, it is perhaps more likely that local health care workers will report a pattern of unusual illness or there will be a wave of sick people seeking emergency medical attention.

You will probably learn of the danger through an emergency radio or TV broadcast. You might get a phone call. Or, emergency response workers may come to your door.

### **What are some of the possible germs that could be used in bioterrorism?**

The authorities are preparing for possible attacks with several germs or agents. These include:

- **Anthrax:** The tiny anthrax particles can be spread through direct contact with the skin or through the air. Some of the symptoms of skin (cutaneous) anthrax are rash, itching and skin sores called black wounds. Symptoms of lung (inhalation) anthrax are like those of a cold or flu, but without congestion. Anthrax is not contagious from person to person.
- **Smallpox:** Smallpox can be transmitted through the air. The first symptoms generally include high fever, fatigue, and body aches. Normally, two or three days later small raised

bumps appear on the skin. These are usually seen on the face, the arms, and the legs. Smallpox is contagious and infected people need to be isolated.

- **Botulism:** Botulism can be transmitted through the air or by contaminated foods. The symptoms include difficulties seeing, breathing, and swallowing. It is not contagious.
- **Tularemia:** Tularemia is a disease caused by bacteria found in animals and it can be transmitted by breathing the bacteria. The symptoms include sudden fever, chills, headaches, muscle and joint pains. It is not known if it can be transmitted from person to person.
- **Plague:** Plague can be transmitted by infected fleas on rats and mice, etc., or through the air. Symptoms include difficulties seeing, breathing, and swallowing. Plague is contagious.

### **What should you do if there is a bioterrorism event?**

#### **During a declared biological emergency:**

- If a family member becomes sick, it is important to be suspicious. Do not assume, however, that you should go to a hospital emergency room or that any illness is the result of the biological attack. Symptoms of many common illnesses may overlap.
- Use common sense, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.
- Consider if you are in the group or area authorities believe to be in danger.
- If your symptoms match those described and you are in the group considered at risk, immediately seek emergency medical attention.

#### **If you are potentially exposed:**

- Follow instructions of doctors and other public health officials.
- If the disease is contagious expect to receive medical evaluation and treatment. You may be advised to stay away from others or even deliberately quarantined.
- For non-contagious diseases, expect to receive medical evaluation and treatment.

### **What is chemical contamination?**

Contamination can be caused by an attack. An individual or a group can use a toxic gas, liquid or solid that can poison people and the environment. Contamination can also be caused by an accident; for example when a tank of an industrial toxic breaks and releases poison.

### **How can you tell if there is chemical contamination?**

Possible signs of a chemical attack are:

- Many people suffering from watery eyes, twitching, choking, having trouble breathing or losing coordination.
- Many sick or dead birds, fish or small animals are also cause for suspicion.

## **What are some poisons that can cause chemical contamination?**

The authorities are preparing to deal with possible situations with chemical contamination (whether by an attack or by accident) with toxics such as:

- **Ricin:** Ricin is made from the seeds of the castor bean plant. People can be poisoned by breathing ricin in mist or powder. It can also be swallowed if it is in water or food. A very small amount is enough to kill an adult. The main symptoms of ricin poisoning depend on the way in which the person was exposed and the dose, although in the most serious cases, many organs can be affected. There is no antidote for ricin. Ricin poisoning is treated by giving the victim medical attention to minimize the effects of the poisoning.
- **Chlorine:** Chlorine is one of the chemical substances most commonly manufactured in the United States. Its most important uses are as bleach in the manufacture of paper and fabric, but it is also used to make pesticides (insect killers), rubber, and solvents.
- **Sarin:** Sarin is a man-made chemical warfare agent classified as a nerve agent. Nerve agents are the most toxic and rapidly acting of the known chemical warfare agents. They are similar to certain kinds of pesticides (insect killers) in terms of how they work and what kind of harmful effects they cause. However, nerve agents are much more potent than pesticides.

## **What should you do if you think you have been exposed to chemical contamination?**

- If your eyes are watering, your skin is stinging, and you are having trouble breathing, you may have been exposed to a chemical.
- If you think you may have been exposed to a chemical, strip immediately and wash.
- Look for a hose, fountain, or any source of water, and wash with soap if possible, being sure not to scrub the chemical into your skin.
- Seek emergency medical attention.

## **What should you do if there is a bomb or an explosion?**

**If there is an explosion:**

- Take shelter against your desk or a sturdy table.
- Exit the building as soon as possible.
- Do not use elevators.
- Check for fire and other hazards.
- Take your emergency supply kit if time allows.

## **What should you do if there is a fire?**

**If there is a fire:**

- Exit the building ASAP.
- Crawl low if there is smoke.
- Use a wet cloth, if possible, to cover your nose and mouth.

- Use the back of your hand to feel the upper, lower, and middle parts of closed doors.
- If the door is not hot, brace yourself against it and open slowly.
- If the door is hot, do not open it. Look for another way out.
- Do not use elevators.
- If you catch fire, do not run. Stop-drop-and-roll to put out the fire.
- If you are at home, go to a previously designated meeting place.
- Account for your family members and carefully supervise small children.
- Never go back into a burning building.

### **What if you are trapped in debris?**

- If possible, use a flashlight to signal your location to rescuers.
- Avoid unnecessary movement so that you don't kick up dust.
- Cover your nose and mouth with anything you have on hand. (Dense-weave cotton material can act as a good filter. Try to breathe through the material.)
- Tap on a pipe or wall so that rescuers can hear where you are.
- If possible, use a whistle to signal rescuers.
- Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust.

### **What is an emergency caused by radiation?**

A radiation emergency could be a “dirty bomb” or an accident in a nuclear reactor that contaminates a specific area with radioactive materials.

### **What is radiation?**

Radiation is a form of energy that is present all around us. There are different types of radiation; some have more energy than others. Radiation that has a lot of energy is the kind that can injure people.

### **How can radiation exposure happen?**

People are exposed to small amounts of radiation every day, both from naturally occurring sources (such as elements in the soil or cosmic rays from the sun), and man-made sources. Man-made sources include some electronic equipment (such as microwave ovens and television sets), medical sources (such as x-rays, certain diagnostic tests, and treatments), and from nuclear weapons testing.

The amount of radiation from natural or man-made sources to which people are exposed is usually small; a radiation emergency (such as a nuclear power plant accident or a terrorist event) could expose people to small or large doses of radiation, depending on the situation.

### **What are the consequences of being exposed to radiation?**

Radiation can affect the body in a number of ways, and the negative health effects of exposure may not be apparent for many years. These negative health effects can range from mild effects, such as skin reddening, to serious effects such as cancer and death, depending on the amount of radiation absorbed by the body (the dose), the type of radiation, the route of exposure, and the length of time a person was exposed.



Exposure to very large doses of radiation may cause death within a few days or months.

Exposure to lower doses of radiation may lead to an increased risk of developing cancer or other negative health effects later in life.

### **What type of terrorist acts could be related to radiation?**

Possible terrorist events could involve introducing radioactive material into the food or water supply, using explosives (like dynamite) to scatter radioactive materials (called a “dirty bomb”), bombing or destroying a nuclear facility, or exploding a small nuclear device.

Although introducing radioactive material into the food or water supply most likely would cause great concern and fear, it probably would not cause much contamination or increase the danger of negative health effects.

Similarly, even though a dirty bomb could cause serious injuries from the explosion, it most likely would not have enough radioactive material to cause serious radiation sickness among large numbers of people. However, people who were exposed to radiation scattered by the bomb could have a greater risk of developing cancer later in life, depending on the dose they received.

### **What are the possible causes of an outbreak or an epidemic?**

In addition to bioterrorism, authorities are preparing to deal with possible outbreaks or epidemics of diseases such as:

- **Bird flu (avian influenza or “chicken flu”):** Bird flu is caused by influenza viruses (germs) that are naturally present in wild birds. Avian flu virus is very common among wild birds and usually causes few problems. However, there is a variation that is very serious; it can kill domesticated birds and be transmitted to humans. Humans have no immunity nor is there a vaccine. As of this writing, no cases of bird flu have been found in the United States—neither in birds nor in humans. People who have been infected with the serious form of the virus show symptoms that are typical of flu in humans (fever, cough, sore throat and muscle pains) as well as pneumonia, severe respiratory disease and other complications that can put life at risk.
- **Pandemic flu: Pandemic flu is a severe human flu that causes a** global outbreak (also called a pandemic) of serious diseases like pneumonia. A flu pandemic occurs when a new influenza virus suddenly changes. Since it is new, people have little or no immunity, and it can spread easily from person to person. Currently, there is no pandemic flu. Once the virus begins to spread, however, pandemics are considered impossible to stop because the virus spreads quickly through coughing and sneezing. Since infected people can transmit the virus before they experience symptoms, the risk of spreading it is higher.

Pandemic flu and bird flu are different from common or seasonal flu. Seasonal flu is a respiratory disease that can be transmitted from person to person. Most people have some immunity to it, and there is a vaccine available.

- **SARS** (Severe acute respiratory syndrome): SARS is a respiratory disease caused by a virus. SARS was first reported in Asia in February 2003. Over the next few months, the

illness spread to more than two dozen countries before the global outbreak of 2003 was contained. Few cases happened in the United States. The main way that SARS seems to spread is by close person-to-person contact. The symptoms are like those of the flu—high fever, headache, and body aches. Most patients develop pneumonia and about 1 in 10 infected people die from the disease. Government agencies are monitoring this disease.

- **West Nile virus:** West Nile virus is a virus that was commonly found in Africa, Asia, and the Middle East. The virus can infect humans, birds, mosquitoes, horses, and some other mammals. It can cause a mild illness that seems like the flu, or it can cause more severe diseases like encephalitis and meningitis (infections in the brain). People are infected through mosquito bites by infected mosquitoes. Mosquitoes infected with the virus have been found in the Washington area. Because of this, all residents are at risk of getting infected with West Nile virus. People over 50 have a higher risk of serious disease. Even so, few people who are bitten get seriously ill. To prevent the disease, put a moderate amount of insect repellent on skin that is not covered by clothing. To avoid mosquito breeding, eliminate standing water.

Montgomery County, the State of Maryland, the federal government and federal agencies are taking steps to prepare for these diseases.

### **How can you tell if there is an outbreak?**

Health providers will probably notice an unusual disease pattern or a large number of people will go to emergency medical centers.

Health authorities will inform the public about who is affected and what to do through radio, television, and other media.

# ***FOR MORE INFORMATION***

## **Internet:**

Montgomery County, Maryland:  
[www.montgomerycountymd.gov/](http://www.montgomerycountymd.gov/)

American Red Cross:  
[www.redcross.org](http://www.redcross.org)

Centers for Disease Control and Prevention:  
<http://emergency.cdc.gov/>

Federal Emergency Management Agency:  
[www.fema.gov/](http://www.fema.gov/)

Department of Homeland Security:  
[www.ready.gov/](http://www.ready.gov/)  
1-800-BE-READY (1-800-237-3239)

## **By telephone:**

If you do not have access to a computer and you need more information about emergency preparedness, please call the Information Line of the Department of Health and Human Services of Montgomery County: 240-777-1245 or TTY 240-777-1295.

# Resources Used to Prepare This Document

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Condado de Montgomery. Centro de Prácticas Avanzadas. *Todos Listos. Preparación de personas y familias para situaciones de catástrofe.*

Condado de Montgomery. Centro de Prácticas Avanzadas. *Plan 9.* Una guía simple sobre los nueve elementos esenciales que lo ayudarán a resguardarse donde esté en caso de emergencia.

Cruz Roja Americana. Terrorismo. *Cómo Prepararse para lo Inesperado.* A1366S Oct. 2001. <http://www.cruzrojaamericana.org/general.asp?SN=200&OP=216&SUOP=252>

Departamento de Seguridad Nacional. *La Preparación Tiene Sentido. Prepárese Ahora.* [http://www.listo.gov/america/downloads/Ready\\_Brochure\\_Screen\\_ESP\\_20040129.pdf](http://www.listo.gov/america/downloads/Ready_Brochure_Screen_ESP_20040129.pdf)

Departamento de Seguridad Nacional. Agencia Federal para el Manejo de Emergencias. *¿Está Listo? Una Guía Completa para la Preparación Ciudadana.* IS-22 Agosto de 2004. [http://www.fema.gov/spanish/areyouready/index\\_spa.shtm](http://www.fema.gov/spanish/areyouready/index_spa.shtm)

Departamento de Seguridad Nacional. Agencia Federal para el Manejo de Emergencias. *Las Aventuras de Julia y René: Los Mellizos Desastre.* <http://www.fema.gov/kids/twins/enespanol.htm>



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[WWW.MONTGOMERYCOUNTYMD.GOV/APC](http://WWW.MONTGOMERYCOUNTYMD.GOV/APC)